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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,214	04/02/2004	Liangchi Hsu	871.0110.U1(US)	2420
29683	7590	09/20/2005	EXAMINER	
HARRINGTON & SMITH, LLP			NGUYEN, BRIAN D	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	
			2661	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,214

Applicant(s)

HSU ET AL.

Examiner

Brian D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 7/28/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23-25 and 27-40 is/are rejected.
- 7) ☒ Claim(s) 22 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Note: The terms: “adapted to” is not positively recited limitation. Therefore, the limitations followed this term is not considered the claimed limitations. If the applicant would like to claim the limitations followed this term, it is suggested that the applicant delete “adapted to” from the claims.

Claim Objections

2. Claims 5-9, 14-18, and 29 are objected to because of the following informalities:

Claim 5, line 13, “a base station” seems to refer back to “a base station” in line 6. If this is true, it is suggested to change “a base station” to --the base station--.

Claim 15, it is suggested to delete “MAC_ID” in line 2 and “a” in line 4 and insert --of the plurality of mobile stations-- after “mobile station”.

Claim 29, line 5, it is suggested to insert --of the-- after “the control hold mode”.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-18, 20, 24, 27-31, and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15 and 27 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

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The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claims 16, 20, 24, and 39 are unclear because if the second group that use at least a forward link channel includes a reverse link channel, then the second group will be the same as the first group.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 17, 21, 25, 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations: "the first group . . . use a first carrier, and the second group . . . use a second carrier" was not described in the specification.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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8. Claims 1-4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-4 are directed to software (access control identification code) per se, which lacks a tangible embodiment.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 5-14 and 27-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Duncan Ho et al (2003/0128683).

Regarding claims 5, 9, Duncan Ho discloses a method comprising: imitating a transition by the mobile station from Control Hold Mode of a reverse link packet data channel for communication between a base station and the mobile station to an active state of the reverse link packet data channel, by sending a transition mode request; turning on a rate request channel by the mobile station, the mobile station requesting a reverse link transmission; monitoring a rate grant channel with the mobile station; acknowledging the reception of the mode transition request by sending an individual grant to the mobile station from the base station, thereby granting permission to transmit; transitioning the mobile station to active state upon receipt of the grant, the mobile station starting to transmit on the reverse link data channel in autonomous mode; and, commencing monitoring of a Forward Acknowledgement Channel with the mobile

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station. Wherein the base station controls the transition from the active state to Control Hold Mode when the Forward Packet Data Channel is assigned. Wherein the rate of the grant channel is reduced to reduce the mobile station power consumption (see abstract; paragraphs 0009, 0012, 0057-0061; and figure 4).

Regarding claims 6-8, 14, Duncan discloses initiating a transition by the mobile station from the active state comprises: gating a reverse pilot and a reverse rate request channel; detecting the transition by the base station; stopping the transmission on the Forward Acknowledgement Channel; stopping the monitoring of the reverse link; and transitioning the mobile station to Control Hold Mode. Wherein a reverse rate request channel is gated at a reduced rate of one half or less (see paragraphs 0031-0043).

Regarding claim 10, Duncan discloses method comprising: initiating a transition by a base station from a Control Hold Mode of a reserve link packet data channel for communication between the base station and a mobile station to an active state of the reverse link packet data channel by sending a transition mode request; sending an individual grant via a forward grant channel to the mobile station to initiate the mode transition; and transitioning the mobile station to the active state of the reverse link packet data channel, wherein the mobile station transmits on the reverse link packet data channel in the active state (see abstract; paragraphs 0009, 0013, 0062-0066; and figure 5).

Regarding claims 11-12, Duncan discloses a method comprising: initiating a transition by a mobile station from a Control Hold Mode of a reverse link packet data channel to an active state of the reverse link packet data channel, by sending a transition mode request; initiating on a rate request channel by the mobile station, the mobile station requesting a reverse link

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transmission; commencing the monitoring of a rate grant channel and a Forward Acknowledgement Channel with the mobile station; acknowledging the reception of the mode transition request by sending an individual grant to the mobile station from the base station, thereby granting permission to transmit; commencing continuous transmission by the mobile station on a reverse channel quality indication channel; turning on a reverse acknowledgement channel; commencing monitoring of the Forward Packet Data Control Channel; and transitioning the mobile station to active state of the reverse link packet data channel upon receipt of a control message with specific message type, the mobile station starting to transmit autonomous rate on the reverse link data channel. Wherein the reverse channel quality indication channel is gated at a reduced rate of one half or less (see abstract; paragraphs 0009, 0012, 0038, 0057-0061; and figure 4).

Regarding claim 13, Duncan discloses a method comprising: initiating a transition by a base station from Control Hold Mode of a reverse link packet data channel to an active state of the reverse link packet data channel by sending a transition mode request; settling an extended message type identifier indicating that the mobile station is to exit the packet data channel Control Hold Mode; initiating the mode transition by sending a medium access control identification code by the granting base station via a Forward Packet Data Control Channel to the mobile station; turning on a Reverse Channel Quality Indication Channel and a Reverse Acknowledgement Channel by the mobile station; monitoring the Forward Packet Data Control Channel; and transitioning the mobile station to the active state of the reverse link packet data channel, wherein the mobile station transmits on the reverse link packet data channel in the

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active state of the reverse link packet data channel (abstract; paragraphs 0009, 0013, 0062-0066; and figure 5).

Regarding claims 27-40, claims 27-40 are mobile station, computer readable medium, or apparatus claims that include limitations described in method claims 5-14. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-4, 15-17, 19-21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindskog et al (6,622,251) in view of Lorenz (6,700,877).

Regarding claim 1, Lindskog discloses a medium access control identification code (MAC_ID) embodied in a network device and dividing the mobile stations into two groups based on MAC_ID (see col. 6, lines 20-27; col. 9, lines 13-18; col. 10, line 52-col. 11, line 28).

Lindskog does not specifically disclose the base station assigns MAC_ID to the mobile station. However, Lorenz discloses assigning MAC_ID to the mobile station in a descending order and descending orders (see, for example, col. 3, lines 64-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to assign MAC_ID in a descending order and descending orders as taught by Lorenz in the system of Lindskog in order to use the information related to a MAC_ID to improve system management.

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Regarding claims 2-4, Lindskog in view of Lorenz the first group uses a forward link channel and the second group uses a reverse link channel. However, to divide the terminals into two groups based on forward and reverse link channel is a matter of design choice because the mobile terminals with common characteristics/features can be grouped into the same group. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to group the mobile terminals based on forward/reverse link channel in order to meet specific needs.

Regarding claims 15, 19, and 23, claims 15, 19, and 23 are apparatus, method, or computer readable medium claims that have substantially the same limitations as claim 1. Therefore, they are subject to the same rejection.

Regarding claims 16-17, 20-21, and 24-25, claims 16-17, 20-21, and 24-25 are apparatus, method, or computer readable medium claims that have substantially the same limitations as claim 1. Therefore, they are subject to the same rejection.

Allowable Subject Matter

13. Claims 18, 22, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

14. Applicant's arguments filed 7/28/05 have been fully considered but they are not persuasive.

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Regarding claims 1-4, the applicant amended the claim to include the limitation: “embodied in a network device”. However, the MAC_ID of claim 1 is just an identifier (a number, for example) assigned to the network device. The MAC_ID embodied in a network device as claimed in claim 1 is not **computer executable instructions**, stored in a computer readable medium, **executed by a computer**. Therefore, amended claim 1 does not overcome the 101 rejection. Regarding art rejections, the applicant argued that the system of Lindskog does not disclose MAC_ID assignment. Although the examiner believes that Lindskog implicitly discloses this limitation during the setup process between the bas and the mobile station, the examiner includes Lorenz reference in this Office action to clearly show this assigning process. The applicant also argued that Ho appears to be directed to a control hold mode for a forward link and not a reverse link data packet. The examiner disagrees because, for example, in the abstract, Ho clearly teaches of “methods and apparatus are presented for implementing an improved **control hold mode that reduces the load of the reverse link**”. The applicant also argued that there is no mention in the cited text of Ho of a reverse link packet data channel or communication of the same. The examiner disagrees because Ho mentions the reverse channel a plenty of times in the reference. The applicant is reminded that the reverse link data channel is a channel for transmitting data from the mobile to the base station and this is a standard not an applicant’s invention.

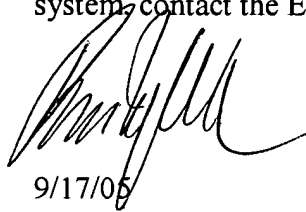
Conclusion

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



9/17/05

BRIAN NGUYEN
PRIMARY EXAMINER